

**ABSTRACT OF THE INVENTION**

A method of transmitting packets over a network includes steps of partitioning a transmission interval into discrete time slots and reaching agreement between a transmitting node and receiving node as to when the transmitting node will transmit packets. The intended receiving node sends a reception map to the transmitter indicating time slots that have not yet been allocated. The transmitter proposes a delivery schedule including time slots that it will use for transmission. After agreement by the receiving node, the transmitter transmits packets according to the agreed-upon schedule. Other transmitters can similar arrange to transmit during time slots not already allocated for the receiving node.